

Appl. No. 10/689,112
Response to Office action of August 31, 2005
Page 2

Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-65. (Canceled)

66. (Currently Amended) A catheter assembly, comprising:

a catheter body including:

a proximal portion, an intermediate portion extending from the proximal portion, the intermediate portion defining a longitudinal axis, and a distal portion extending from the intermediate portion and terminated by a distal end of the catheter body, the distal portion forming a coil about a central loop axis, the central loop axis substantially parallel to the longitudinal axis,

an ablation section formed along the coil,

wherein the distal portion is more flexible than the proximal portion such that the distal portion more easily deflects relative to the proximal portion.

a first lumen extending through the proximal portion and the intermediate portion to the distal portion and terminated at an opening proximal to the ablation section;

a second lumen extending through a proximal portion of a catheter body and an intermediate portion of the catheter body and terminating at a closed end distal to the ablation section; and

an ablation electrode formed within the ablation section;

wherein, when the ablation electrode is activated, a lesion is formed in tissue contacting the ablation section.

Appl. No. 10/689,112
Response to Office action of August 31, 2005
Page 3

67. (Previously presented) The catheter assembly of claim 66, further comprising a fluid source and wherein the catheter body further includes:

a porous wall including an exterior surface, the porous wall formed about the second lumen in the ablation section;

wherein the fluid source is coupled to the second lumen and, while the ablation electrode is activated, the fluid source supplies a conductive liquid, through the second lumen, to the exterior surface of the ablation section in contact with the tissue, the conductive liquid being energized by the ablation electrode.

68. (Previously presented) The catheter assembly of claim 66, wherein the central loop axis of the distal portion is substantially aligned with the longitudinal axis formed by the intermediate portion.

69. (Previously presented) The catheter assembly of claim 66, further comprising a locating device slideably engaged by the first lumen and a shaping device configured to slide within the second lumen.

70. (Previously presented) The catheter assembly of claim 69, wherein the locating device comprises a guide wire.

71. (Previously presented) The catheter assembly of claim 66, further comprising a sensing element coupled to the distal portion of the catheter body.

72. (Previously presented) The catheter assembly of claim 71, wherein the sensing element is positioned distal to the ablation section.

73. (Previously presented) The catheter assembly of claim 71, wherein the sensing element is positioned proximal to the ablation section.

Appl. No. 10/689,112
Response to Office action of August 31, 2005
Page 4

74. (Previously presented) The catheter assembly of claim 71, wherein the sensing element comprises an electrode adapted to sense electrical activity of tissue.

75. (Previously presented) The catheter assembly of claim 71, wherein the sensing element comprises a thermocouple.

76. (Previously presented) The catheter assembly of claim 71, further comprising a second sensing element.

77. (Previously presented) The catheter assembly of claim 76, wherein the sensing element is positioned proximal to the ablation section and the second sensing element is positioned distal to the ablation section.

78. (Previously presented) The catheter assembly of claim 67, wherein the porous wall comprises a microporous polymer.

79. (Previously presented) The catheter assembly of claim 78, wherein the microporous polymer comprises expanded polytetrafluoroethylene.

80. (Previously presented) The catheter assembly of claim 67, wherein the porous wall comprises a polymer having pores formed therethrough via a secondary process.

81. (Previously presented) The catheter assembly of claim 67, wherein the porous wall comprises pores, the pores having, on average, a diameter between approximately 5 microns and approximately 100 microns.

Appl. No. 10/689,112
Response to Office action of August 31, 2005
Page 5

82. (Previously presented) The catheter assembly of claim 81, wherein the diameter is between approximately 5 microns and approximately 25 microns.

83. (Previously presented) The catheter assembly of claim 66, further comprising a guide catheter slideably engaging the catheter body.

84. (Currently Amended) A method for forming an ablation pattern to electrically isolate a pulmonary vein for treatment of cardiac arrhythmia, comprising:

passing a shaping device through a first lumen extending through a proximal portion of a catheter body and an intermediate portion of the catheter body and terminating at a closed end distal to an ablation section comprising a coil disposed on the catheter body proximate a distal portion of the catheter body and extending from the intermediate portion, wherein the distal portion is more flexible than the proximal portion such that the distal portion more easily deflects relative to the proximal portion;

passing a locating device through a second lumen extending through a proximal portion of a catheter body and an intermediate portion of the catheter body and terminating in an opening proximal to the ablation section;

passing a distal tip of the locating device through the distal portion of the catheter body to locate a pulmonary vein from within a left atrium; and

advancing the catheter body over the locating device;

~~retracting the shaping device;~~ and

pressing the ablation section against tissue surrounding the pulmonary vein.

85. (Previously presented) The method of claim 84, further comprising measuring electrical activity of the tissue via electrodes coupled to the distal portion of the catheter body in proximity to the ablation section.

Appl. No. 10/689,112
Response to Office action of August 31, 2005
Page 6

86. (Previously presented) The method of claim 84, further comprising irrigating the ablation section via fluid flow through a second lumen of the catheter body, the second lumen extending through the proximal portion, the intermediate portion and the distal portion of the catheter body.